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CLAIMS

1. The peptides from hPTH(1-37) having the sequence

hPTH 1-10
NH_2-Ser^1-Val^2-Ser^3-Glu^4-Ile^5-Gln^6-Leu^7-Met^8-His^9-Asn^{10}-OH (1)

hPTH 1-9
NH_2-Ser^1-Val^2-Ser^3-Glu^4-Ile^5-Gln^6-Leu^7-Met^8-His^9-OH (2)

hPTH 1-8
NH_2-Ser^1-Val^2-Ser^3-Glu^4-Ile^5-Gln^6-Leu^7-Met^8-OH (3)

hPTH 1-7
NH_2-Ser^1-Val^2-Ser^3-Glu^4-Ile^5-Gln^6-Leu^7-OH (4)

hPTH 1-6
NH_2-Ser^1-Val^2-Ser^3-Glu^4-Ile^5-Gln^6-OH (5)

hPTH 1-5
NH_2-Ser^1-Val^2-Ser^3-Glu^4-Ile^5-OH (6)

hPTH 9-18
NH_2-His^9-Asn^{10}-Leu^{11}-Gly^{12}-Lys^{13}-His^{14}-Leu^{15}-Asn^{16}-Ser^{17}-
Met^{18}-OH (7)

hPTH 10-18
NH_2-Asn^{10}-Leu^{11}-Gly^{12}-Lys^{13}-His^{14}-Leu^{15}-Asn^{16}-Ser^{17}-Met^{18}-OH (8)

hPTH 11-18
NH_2-Leu^{11}-Gly^{12}-Lys^{13}-His^{14}-Leu^{15}-Asn^{16}-Ser^{17}-Met^{18}-OH (9)

hPTH 12-18
NH_2-Gly^{12}-Lys^{13}-His^{14}-Leu^{15}-Asn^{16}-Ser^{17}-Met^{18}-OH (10)

hPTH 13-18
NH_2-Lys^{13}-His^{14}-Leu^{15}-Asn^{16}-Ser^{17}-Met^{18}-OH (11)

hPTH 14-18
NH_2-His^{14}-Leu^{15}-Asn^{16}-Ser^{17}-Met^{18}-OH (12)

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hPTH 9-17

$NH_2-His^9-Asn^{10}-Leu^{11}-Gly^{12}-Lys^{13}-His^{14}-Leu^{15}-Asn^{16}-Ser^{17}-OH$ (13)

hPTH 9-16

$NH_2-His^9-Asn^{10}-Leu^{11}-Gly^{12}-Lys^{13}-His^{14}-Leu^{15}-Asn^{16}-OH$ (14)

hPTH 9-15

$NH_2-His^9-Asn^{10}-Leu^{11}-Gly^{12}-Lys^{13}-His^{14}-Leu^{15}-OH$ (15)

hPTH 9-14

$NH_2-His^9-Asn^{10}-Leu^{11}-Gly^{12}-Lys^{13}-His^{14}-OH$ (16)

hPTH 9-13

$NH_2-His^9-Asn^{10}-Leu^{11}-Gly^{12}-Lys^{13}-OH$ (17)

hPTH 24-37

$NH_2-Leu^{24}-Arg^{25}-Lys^{26}-Lys^{27}-Leu^{28}-Gln^{29}-Asp^{30}-Val^{31}-His^{32}-Asn^{33}-$
$Phe^{34}-Val^{35}-Ala^{36}-Leu^{37}-OH$ (18)

hPTH 25-37

$NH_2-Arg^{25}-Lys^{26}-Lys^{27}-Leu^{28}-Gln^{29}-Asp^{30}-Val^{31}-His^{32}-Asn^{33}-$
$Phe^{34}-Val^{35}-Ala^{36}-Leu^{37}-OH$ (19)

hPTH 26-37

$NH_2-Lys^{26}-Lys^{27}-Leu^{28}-Gln^{29}-Asp^{30}-Val^{31}-His^{32}-Asn^{33}-$
$Phe^{34}-Val^{35}-Ala^{36}-Leu^{37}-OH$ (20)

hPTH 27-37

$NH_2-Lys^{27}-Leu^{28}-Gln^{29}-Asp^{30}-Val^{31}-His^{32}-Asn^{33}-$
$Phe^{34}-Val^{35}-Ala^{36}-Leu^{37}-OH$ (21)

hPTH 28-37

$NH_2-Leu^{28}-Gln^{29}-Asp^{30}-Val^{31}-His^{32}-Asn^{33}-Phe^{34}-Val^{35}-Ala^{36}-$
$Leu^{37}-OH$ (22)

hPTH 29-37

$NH_2-Gln^{29}-Asp^{30}-Val^{31}-His^{32}-Asn^{33}-Phe^{34}-Val^{35}-Ala^{36}-Leu^{37}-OH$ (23)

hPTH 30-37

$NH_2-Asp^{30}-Val^{31}-His^{32}-Asn^{33}-Phe^{34}-Val^{35}-Ala^{36}-Leu^{37}-OH$ (24)

hPTH 31-37

$NH_2-Val^{31}-His^{32}-Asn^{33}-Phe^{34}-Val^{35}-Ala^{36}-Leu^{37}-OH$ (25)

hPTH 32-37

$NH_2-His^{32}-Asn^{33}-Phe^{34}-Val^{35}-Ala^{36}-Leu^{37}-OH$ (26)

hPTH 33-37

$NH_2-Asn^{33}-Phe^{34}-Val^{35}-Ala^{36}-Leu^{37}-OH$ (27)

hPTH 24-36

$NH_2-Leu^{24}-Arg^{25}-Lys^{26}-Lys^{27}-Leu^{28}-Gln^{29}-Asp^{30}-Val^{31}-His^{32}-Asn^{33}-$
$Phe^{34}-Val^{35}-Ala^{36}-OH$ (28)

hPTH 24-35

$NH_2-Leu^{24}-Arg^{25}-Lys^{26}-Lys^{27}-Leu^{28}-Gln^{29}-Asp^{30}-Val^{31}-His^{32}-Asn^{33}-$
$Phe^{34}-Val^{35}-OH$ (29)

hPTH 24-34

$NH_2-Leu^{24}-Arg^{25}-Lys^{26}-Lys^{27}-Leu^{28}-Gln^{29}-Asp^{30}-Val^{31}-His^{32}-Asn^{33}-$
$Phe^{34}-OH$ (30)

hPTH 24-33

$NH_2-Leu^{24}-Arg^{25}-Lys^{26}-Lys^{27}-Leu^{28}-Gln^{29}-Asp^{30}-Val^{31}-His^{32}-$
$Asn^{33}-OH$ (31)

hPTH 24-32

$NH_2-Leu^{24}-Arg^{25}-Lys^{26}-Lys^{27}-Leu^{28}-Gln^{29}-Asp^{30}-Val^{31}-His^{32}-OH$ (32)

hPTH 24-31

$NH_2-Leu^{24}-Arg^{25}-Lys^{26}-Lys^{27}-Leu^{28}-Gln^{29}-Asp^{30}-Val^{31}-OH$ (33)

hPTH 24-29

$NH_2-Leu^{24}-Arg^{25}-Lys^{26}-Lys^{27}-Leu^{28}-Gln^{29}-OH$ (34)

hPTH 24-28

$NH_2-Leu^{24}-Arg^{25}-Lys^{26}-Lys^{27}-Leu^{28}-OH$ (35)

2.   The peptides according to claim 1, which are modified at the N-terminal end, in the side-chain and/or at the C-terminal end, taking the form of acetylation, amidation, phosphorylation and/or glycosylation products and/or are bound to carrier proteins such as hemocyanin, thyroglobulin, bovine serum albumin, ovalbumin, or mouse serum albumin.

3.   A diagnostic agent which can be obtained using the _per se_ known immunization of animals with at least one of the peptides according to claim 1, recovering fractions containing immunoglobulins from the immunized animals, and isolating fractions having an antibody titer against at least one of the peptides according to claim 1, and which optionally contains additional adjuvants and/or vehicles.

4.   Antibodies or fragments of antibodies, which can be obtained by immunizing animals with at least one of the peptides according to claim 1.

5.   Use of the peptides according to claim 1 for producing an agent for the diagnosis of biologically active hPTH(1-37).

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